

REMARKS

Reconsideration of this application is respectfully requested.

An information disclosure statement (IDS) was submitted on August 11, 2003.

The PTO is requested to return an initialed copy of the IDS 1449 form indicating that the references cited in the IDS have been considered.

I. Interview Summary

The Examiner's written interview summary is correct. The courtesy of the examiner during the interview is appreciated. During the interview, applicants discussed narrowing the claims to recite specific features of the blood circuit and cartridge including: requiring the cartridges to be configured to be seated in a recess in the pump device; the location and orientation of the pressure sensors on the underside of the cartridge housings; that the cartridge housing has two separate components, one of which includes the filter, and that a pressure transducer is fitted in the filter. Amended claims and new claims are presented herein that are consistent with the discussions during the interview. It is respectfully submitted that the amendment claims patentably distinguish the applied prior art for the reasons stated below and discussed during the interview.

II. Rejection of Claims

The rejection of claims 1 to 7, 9 to 11 and 13 to 21 as being obvious over Flank et al (U.S. Patent No. 4,838,865 – Flank) in view of Bullister et al (US Patent 6,171,253 – Bullister) and Crozafon et al (US Patent 6,272,930 – Crozafon) is traversed and has been overcome by amendment.

Serial No. 09/660,195

June 17, 2004

Several elements of the rejected claims are not disclosed or suggested by Flank, Bullister or Crozafon including (without limitation):

- First and second cartridge housings each supporting a tube loop, as is recited in claims 1 to 7, 9 to 11 and 13 to 21. Bullister and Crozafon do not disclose any housing. Flank discloses a cassette 1, 1a, that has an inlet 17 and an outlet 19 that connect to a pump loop segment 10. Flank does not suggest distinct and separate cartridge housings, one of which holds a loop of the blood passage and the other of which supports the filter. Flank teaches away from mounting a tube loop on the cartridge, as is recited in the claims. Similarly, claim 7 requires the tube loop to be fixed to the cartridge housing and engaging a pump raceway when the housing is latched into the pump device.
- A cartridge housing that seats in a recess of the pump device such that the tube loop engages the pump. (Claims 1 to 7 and 9 to 11). Flank shows in Figures 1 and 2 a cassette mounted to a flat face of the pump device.
- Blood tube loop and pressure sensor fixed to the underside of a housing. (Claims 7, 16 and 17).

The rejection of claims 8 and 12 as being obvious over Flank, Bullister, Crozafon and further in view of Savitz et al (US Patent 4,229,299 – Savitz) is traversed for the reasons stated above for independent claim 1.

Serial No. 09/660,195

June 17, 2004

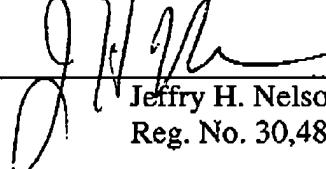
Savitz et al does not teach a blood pressure sensor that is integral with a disposable blood circuit.. Savitz device does not include a description of the pressure sensor but indicates that it is part of the console. *"Located downstream from the negative pressure regulator/flow controller assembly 106 is negative pressure monitoring means 107. The monitoring means may suitably comprise a negative pressure sensor which is operatively connected to visual display means for indicating the magnitude of the negative pressure of the dialysate solution. The negative pressure sensor may also be operatively connected with the negative pressure adjustment means in assembly 106, whereby negative pressure of the dialysate solution may be maintained at a predetermined level."* Accordingly, the combination of Savitz with Flank, Bullister and Crozafon would not have rendered the claimed invention to have been obvious.

All claims are in good condition for allowance. If any small matter remains outstanding, the Examiner is requested to telephone applicants' attorney. Prompt reconsideration and allowance of this application is requested.

Respectfully submitted,

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